Periscope.

MONATSSCHRIFT FUR PSYCHIATRIE UND NEUROLOGIE

(Bd. 13, 1903, Hft. 1, Jan.)

1. The Origin and Course of the Oculomotor Nerve in the Mid-brain. N. MAJANO.
2. Hysterical Attacks Occurring Late in the Course of Epilepsy. F. S. HERMANN.
3. The Forensic Significance of Normal and Pathological Drunkenness. A. CRAMER.
4. Scopolaminum (Hyoscinum) Hydrobromicum. BUMKE.

1. *Oculomotor Nuclei.*—Majano has made a careful study of the oculomotor nuclei in the brain of a man dying at the age of forty-eight years, who presented during life the following conditions. Between eighteen and twenty years of age he had had paralysis of the left eye with slight ptosis. About eighteen months before death he developed symptoms of psychosis. He had numerous stigmata of degeneration; there was slight paresis of the right external rectus, and the left eye only moved imperfectly inward and upward or downward. The ability to lift the left upper lid was also impaired. The right pupil was narrow, the left greatly dilated. The light reflex was sluggish on the right and lost on the left. There seemed to be slight paresis of the facial and hypoglossal nerves. There was also ataxia, Romberg's symptom, diminished knee-jerks and delusions of grandeur. The patient rapidly grew worse and died. At the autopsy the left oculomotor and right abducens were noticeably thin. Majano gives a careful description of the histological changes found in the oculomotor nuclei. (1) Darkschewitch's, Edinger's and Westphal's nuclei were normal on both sides; (2) the anterior median nuclei were very slightly affected, the right side more than the left, although both were doubtful; (3) the dorsal portion of the principal nucleus was degenerated in its whole extent with the exception of the left side at the level of the oculomotor decussation. The ventral portion was degenerated on both sides in the region of the decussation. The accessory nucleus of Bechterew was degenerated on the left, and there was a general reduction of the left principal nucleus; (4) the median nucleus of Bechterew showed changes chiefly in the proximal region on the left side. In the distal portions there was no pronounced difference. (5) Bolliger's nucleus in the neighborhood of the trochlear nucleus was unaffected on either side. Majano believes that a careful comparison of these lesions with the clinical symptoms indicates that there is a partial decussation of the oculomotor nerve. He explains the mechanism of conjugate movements of the eye by supposing that the impulse passes from the abducens nucleus to the principal nucleus on the same side at the point from which the decussated fibers arise, which pass into the oculomotor nerve of the opposite side. He discusses carefully the opinions of different investigators, and believes that there can be no doubt that if we deny the existence of decussated fibers in the proximinal portions of the oculomotor, the existence of commissural fibers uniting the oculomotor nerve nucleus must be accepted. (The paper is still unfinished.)

2. *Hysteria and Epilepsy.*—A man, thirty-five years of age, with a

family history of misuse of alcohol, developed epilepsy at the age of fifteen years after an injury. The epileptic attacks were typical. On one occasion, however, he awoke feeling badly, with contractures in all the limbs without pain. These spasms could be overcome by passive movements. There was a motor aphasia without loss of understanding of what was said. Examination of sensation showed entire loss in the lower extremities, with loss of the pain sense in symmetrical parts of the body. The symptoms were dissipated by faradic electricity. Subsequently the patient had a second hysterical attack with somewhat similar symptoms. The second case, a man of thirty-four, with a family history of misuse of alcohol, had had epilepsy since the age of twelve years. This patient developed nervous hysterical phenomena, such as catalepsy, motor aphasia, loss of pain sense and of taste, rhythmic movements of the head, and these attacks lasted throughout the day. Both cases had had epilepsy for a long time; in both the hysterical manifestations were characteristic and differed from the ordinary epileptic attack. It is possible that the previous alcoholic indulgence of these patients predisposed to hysteria.

3. *Drunkenness.*—Cramer discusses the significance of intoxication, and calls attention to the fact that in the German law it is not an extenuating factor of crime. He speaks of the conditions that give rise to it, either congenital, including the degenerates, and the acquired, which includes chiefly neurasthenics. Intolerance to alcohol may be transient, and therefore even if the patient withstands an experimental indulgence it does not prove that during the criminal act he was in a normal condition. He calls attention to various other factors that influence the resistance to alcohol, and then gives the following points for the diagnosis of pathological intoxication. First, the recognition of a more or less pronounced general pathological foundation. Second, the recognition of particularly injurious factors. Third, the pathological manifestations during the period of drunkenness—anxiety, delirium, hallucinations, peculiar motor reactions, the relation of the pupils, terminal sleep, etc., and then reaches the following general conclusions: (1) Intoxication can only be regarded as pathological before the law when it is influenced by certain factors of disease; (2) The physician should only offer expert testimony when these pathological factors are present; (3) Intolerance of alcohol does not indicate that the intoxication is abnormal; (4) In psychopathic individuals habitual drunkenness may cause repeated crimes of the same character; (5) Experimental intoxication gives positive results only when there is habitual intolerance of alcohol, or when peculiar accompanying pathological conditions are produced; (6) The recognition of a disturbance of consciousness is not sufficient to indicate pathological intoxication; the other morbid factors must be recognized; (7) Amnesia or conditions that occur during the attack may be complete or partial; (8) The crimes are usually those of violence; (9) The attack ceases usually with collapse followed usually by terminal sleep; (10) A sluggish pupillary reaction is of importance when present, but its absence does not exclude pathological conditions.

4. *Hyoscine Hydrobromate.*—Bumke has employed hydrobromate of hyoscine as a hypnotic. He used it only subcutaneously in doses of .0005 to .001. Usually it was given at 8 o'clock in the evening; the effects were prompt and satisfactory in all classes of patients, including melancholics. (The paper is still unfinished.)

J. Sailer (Philadelphia).

(Bd. 13, 1903, Hft. 2, February.)

1. Contribution to the Clinical Significance and Pathogenesis of Babinski's Reflex. W. Specht.
2. Contributions to the Comparative Pathological Anatomy of Acute Encephalitis. H. Dexler.

3. Disease of the Posterior Roots with Loss of the Patellar Tendon Reflexes in Tumors of the Brain. W. Erbslöh.
4. Scopolaminum (Hyoscinum) Hydrobromicum. Bumke.
5. The Origin and Course of the Oculomotor Nerve in the Mid-brain. N. Majano.

1. *Babinski's Reflex.*— Specht has made careful clinical and literary studies of the Babinski reflex. Clinically he investigated 430 cases, 17 of which had distinct lesions of the pyramidal tracts; 22, doubtful lesions of the pyramidal tracts; 30 were children in ages from one to fourteen days. There was one case of epileptic coma, and one of hysterical paralysis of the legs. The other cases were normal. In the 17 certain cases the reflex was prompt and characteristic. In a few it was possible to obtain the extension of the great toe by striking the back of the foot. In the 22 doubtful cases it was present five times in four cases of Liten's disease, and in a case of flaccid degenerative paralysis of the right leg. In the left leg there were also slight spastic symptoms, and the reflex was present. In the other 17 cases there were such conditions as hydrocephalus, multiple sclerosis, syringomvelia, cerebral tumor, infantile cerebral diplegia; in all the reflex was present. In the case of cerebral tumor there was exaggeration of the patellar and Achilles tendon reflexes, but microscopical examination of the cord showed that the pyramidal tracts were intact. In the 30 sucklings the reflex was obtained in 28 cases. In the other two cases, both children eighteen days old, it was doubtful. In a case of epileptic coma which was repeatedly observed, the skin and tendon reflexes disappeared, and the Babinski reflex appeared during the acme of the condition; it then disappeared and the other reflexes returned. In a case of hysterical paralysis it was absent, and also in 359 cases in which there was every reason to believe the central nervous system was normal. He therefore concludes that the great-toe phenomenon may be regarded as a trustworthy symptom of degeneration of the pyramidal tracts, or in those cases in which it is present and no organic disease exists, it indicates a functional disturbance of the pyramidal tract. He gives a theoretical explanation of the nature of this reflex, which is based upon the fact that in certain disease conditions of the pyramidal tract the sensory irritation is sufficient merely to produce retraction of the toe without retraction of the leg.

2. *Acute Encephalitis.*—Dexler describes some cases of encephalitis that occurred in animals, with the clinical symptoms and pathological changes. Bacteria that bear any etiological relation to the condition apparently were not present. (The paper is still unfinished.)

3. *Tumor of Brain and Tendon Reflexes.*—Erbslöh reports two cases of brain tumor in which the knee-jerks were absent. The first, a man of forty-eight years, had a tumor in the left temporal sphenoidal lobe, which proved to be an angiosarcoma. The pathological changes were found in the extra and medullary portions of the posterior roots, and some degenerated fibers were also found in the posterior columns. The second case, a man of eighty-seven years, showed the same conditions. Erbslöh admits that he is unable to explain why the posterior roots become degenerated in brain tumor.

4. *Hyoscine Hydrobromate.*—The effect of hyoscine upon healthy individuals appears to vary. It usually produces fatigue, profound sleepiness, and occasionally some dryness of the throat. More rarely, however, patients have hallucinations. The repeated employment of it appears to have no cumulative or other injurious effect upon the patient. He believes that it is the best hypnotic and sedative for excited mental conditions. Symptoms of poisoning only occur when high doses are employed (more than 2 Kilo), or in very rare cases of individual idiosyncrasy. It is not known to produce death, and is without influence upon the course and duration of the psychosis.

5. *Oculomotor Nerves.*—Majano continues his article upon the origin of the oculomotor nerve in the mid-brain. He has had an opportunity of examining a number of additional preparations, including a series from a case of tabes who had developed a left-sided ptosis and a paresis of the right rectus. He found that the predorsal tract was impaired in its entire extent on both sides. The principal nuclei were also affected, particularly the dorsal group on both sides. Some of the other nuclei were also involved from a case of microcephalu in which the movements of the eyes and the reactions of the pupils appeared to be normal; also in a case which was not examined clinically, which presented an enlargement of the right optic thalamus and dilatation of the ventricle. For comparative purposese he examined the brain of a *Macacus* in which bilateral destruction of the occipital and a portion of the parietal lobes had been produced. He gives in detail the histological changes found in these preparations, and draws the following conclusions: First, that the sublongitudinal or dorsal tract arises chiefly from the nucleus of the anterior corpora quadrigemina. Second, that the ventricular portion of Meynert's commissure arises from the dorsomedian nucleus of the dorsal corpora quadrigemina. It appears likely, moreover, that the sublongitudinal tract, after arising from the lateral nucleus of the anterior corpora quadrigemina, passes obliquely downward in the region of Meynert's fibers toward the median line, and lies close to the capsule of the nucleus rubra. From this point some of its fibers pass downward and unite with the root fibers of the oculomotor nerve of the same side. The greater part decussate with the fibers of the opposite side, passing obliquely backward and outward and finally uniting with the root fibers of the oculomotor nerve of the opposite side. J. SAILER (Philadelphia).

BRAIN

(Vol. 25, 1902, No. 3, Autumn.)

1. Degeneration following Lesions of the Retina in Monkeys. J. HERBERT PARSONS.
2. Note on the Arterial Supply of the Brain in Anthropoid Apes. A. S. F. GRÜNBAUM and C. S. SHERRINGTON.
3. Experiments on the Conductivity of the Spinal Cord rendered Anemic by Compression of the Aorta. M. LOEWENTHAL.
4. Further Observations on a Case of Convulsions (Trunk Fit or Lowest Level Fit). J. HUGHLINGS JACKSON and STANLEY BARNES.
5. Hereditary Aphasia: A Family Disease of the Central Nervous System, due possibly to Congenital Syphilis. W. G. STONE and J. J. DOUGLAS.
6. Case of External Spinal Pachymeningitis, implicating the Entire Ventral Surface of the Spinal Dura. C. K. MILLS and W. G. SPILLER.
7. On Changes in the Central Nervous System in the Neuritic Disorders of Chronic Alcoholism. S. J. COLE.
8. Case showing (1) Defective Development of the Dura Mater; (2) Old Meningitis, and (3) Internal Hydrocephalus. HARVEY BAIRD.
9. Pain. JAMES MACKENZIE.

1. *Degeneration Following Lesions of Retina in Monkeys.*—The anatomical evidence that the ganglion cells of the retina are comparable to those of the posterior spinal root has but recently been established. The centripetal afferent fibers may, therefore, be rendered easily an object of degeneration experiments by the Marchi method. The work of Pick, Falchi and Baquis in destroying circumscribed areas of retina and studying after-lesions are well-known both to neurologists and ophthalmologists. The results of their studies regarding the relationship of the retina to that of the optic nerve and chiasm and tracts have recently been confirmed by Parsons in experimental studies upon degeneration following lesions of the retina in monkeys. He also suggests explanations of the presence of degeneration in the retina and optic nerve of the sound side; namely that the fiber degeneration